PI2098

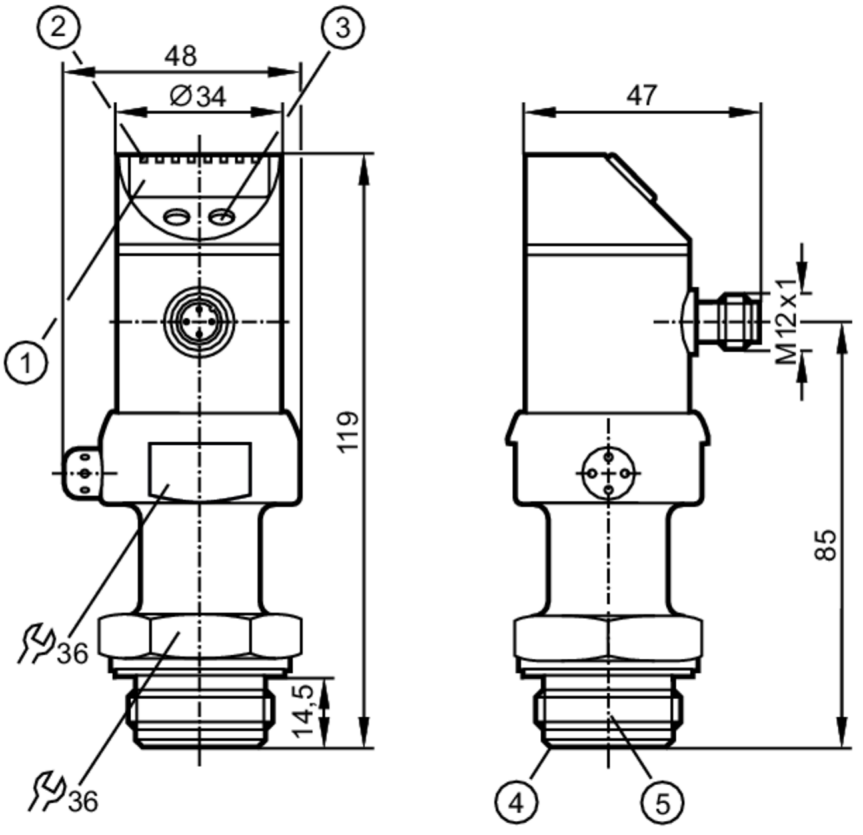
Flush pressure sensor with display

PI-,25BRES30-MFRKG/US/ /P

phase-out article

Alternative articles: PI1008 or PI1708
When selecting an alternative article and accessories please note that technical data may differ!

Please do not use for new projects.
no more adapters available as accessories



1 alphanumeric display 4-digit
2 status LEDs
3 programming button
4 Aseptoflex sealing edge
5 Aseptoflex thread

EC 1935/2004 FCM CN FCM JP Hygienic Cleanable

Product characteristics		
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1	
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar
Process connection	threaded connection Aseptoflex external thread Aseptoflex	

Application		
Special feature	Gold-plated contacts	
Application	flush mountable for the food and beverage industry	
Installation	freely rotatable housing 350°	
Media	viscous media and liquids with suspended particles; liquids and gases	
Medium temperature [°C]	-25...125; (145 max. 1h)	

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Min. burst pressure	30000 mbar	3 MPa	
Pressure rating	6000 mbar	1 MPa	
Type of pressure	relative pressure		
No dead space	yes		
Electrical data			
Operating voltage [V]	18...32 DC		
Current consumption [mA]	< 50		
Min. insulation resistance [MΩ]	100; (500 V DC)		
Protection class	III		
Reverse polarity protection	yes		
Power-on delay time [s]	0.5		
Integrated watchdog	yes		
Inputs / outputs			
Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1		
Outputs			
Total number of outputs	2		
Output signal	switching signal; analogue signal; (configurable)		
Electrical design	PNP/NPN		
Number of digital outputs	1		
Output function	normally open / normally closed; (parameterisable)		
Max. voltage drop switching output DC [V]	2		
Permanent current rating of switching output DC [mA]	250		
Switching frequency DC [Hz]	6		
Number of analogue outputs	1		
Analogue current output [mA]	4...20, invertible; (scalable 1:4)		
Max. load [Ω]	(Ub - 10 V) / 20 mA		
Analogue voltage output [V]	0...10, invertible; (scalable 1:4)		
Min. load resistance [Ω]	2000		
Short-circuit protection	yes		
Type of short-circuit protection	pulsed		
Overload protection	yes		
Measuring/setting range			
Measuring range	-0.0124...0.25 bar	-12.4...250 mbar	
Set point SP [mbar]	-12...250		
Reset point rP [mbar]	-12.4...249.6		
Analogue start point [mbar]	-12.4...187.4		
Analogue end point [mbar]	50...250		
In steps of [mbar]	0.2		
Factory setting		SP1 = 62.4 mbar	rP1 = 57.40 mbar
		ASP = 0.0 mbar	AEP = 250.0 mbar
Accuracy / deviations			
Switch point accuracy	< ± 0,2; (Turn down 1:1)		

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[% of the span]		
Repeatability [% of the span]		< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)
Characteristics deviation [% of the span]		< ± 0,2; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)
Linearity deviation [% of the span]		< ± 0,15; (Turn down 1:1)
Hysteresis deviation [% of the span]		< ± 0,15; (Turn down 1:1)
Long-term stability [% of the span]		< ± 0,1; (Turn down 1:1; per year)
Temperature coefficient zero point [% of the span / 10 K]		< ± 0,05; (0...70 °C)
Temperature coefficient span [% of the span / 10 K]		< ± 0,15; (0...70 °C)
Response times		
Response time [ms]		< 100
Damping process value dAP [s]		0.1...100
Damping for the analogue output dAA [s]		0.1...100
Step response time analogue output [ms]		25
Software / programming		
Parameter setting options		hysteresis / window; normally open / normally closed; switching logic; current/voltage output; Damping; adaptation of displayed values; display can be rotated and switched off; Display unit; zero point; span
Operating conditions		
Ambient temperature [°C]		-25...80
Storage temperature [°C]		-40...100
Protection		IP 67; IP 69K
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF [years]		173
Mechanical data		
Weight [g]		409.5
Housing		cylindrical
Dimensions [mm]		Ø 34 / L = 119
Materials		stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE
Materials (wetted parts)		ceramics (99.9 % Al2O3); stainless steel (316L/1.4435) surface characteristics: Ra < 0,4 µm / Rz = 4 µm; PTFE
Min. pressure cycles		100 million

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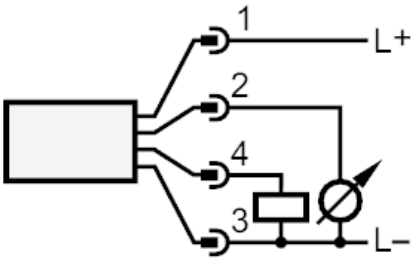
Process connection	threaded connection Aseptoflex external thread Aseptoflex	
Displays / operating elements		
Display	Display unit	6 x, green
	switching status	LED, yellow
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	mbar; kPa; inH2O; mmWS; % of the span	
Remarks		
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Notes	Please do not use for new projects.; no more adapters available as accessories	
Pack quantity	1 pcs.	

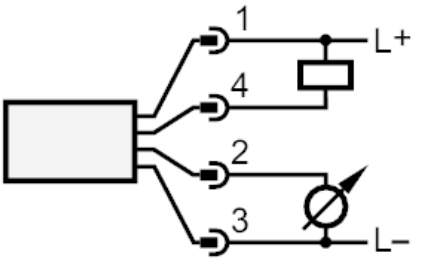
Electrical connection

Connector: 1 x M12; coding: A; Contacts: 4, gold-plated



Connection





OUT1	switching output
OUT2	analogue output